

## TWO NEW ERIOGONUMS FROM BAJA CALIFORNIA, MEXICO

JAMES L. REVEAL AND CRAIG A. HANSON

During recent herbarium studies on *Eriogonum* conducted independently by both authors we discovered two undescribed buckwheats collected by H. S. Gentry from the Sierra Vizcaino region of west-central Baja California, Mexico. They are as follows:

***Eriogonum encelioides*** Reveal & Hanson, spec. nov. Frutex basi valde ramosus, 3–5 dm altus, lanatus; foliis basalibus, oblongis vel ovatis, (2–)2.5–4.5(–5) cm longis, 1.5–2.5(–3) cm latis; inflorescentia ramemosa cum bracteis 2–4 mm longis; involucris turbinato-cylindricis, 2–3.5 mm longis, 1.5–2 mm latis; perianthiis (2.5–)3–3.5 mm longis, albis, extus glabris, intus pilosis, segmentis oblongis vel ellipticis, (2.5–)3–3.5 (–4) mm longis; staminibus exsertis, filamentis basi minute pilosis, antheris oblongis; acheniis exsertis, 4 mm longis, glabris. *E. elongato* et *E. vollmeri* affinis sed habitu frutescente differt et *E. wrightii* var. *pringlei* et var. *nodoso* foliis latioribus differt.

Low spreading loosely branched perennial shrubs 3–5 dm high with the ascending dichotomous branches densely lanate-tomentose throughout, leafy in the lower portions, sheathing up the stem 1–5 cm; leaves oblong to ovate, the blades (2–)2.5–4.5(–5) cm long, 1.5–2.5(–3) cm wide, leathery, the apices acute to obtuse, the bases acute to truncate, densely white-lanate on both surfaces, prominently veined, the petioles long, 1–2 cm long, semi-terete, lanate, tapering to short bases, these extending completely, or nearly so, around the stem; inflorescence of several erect slender primary branches, with several shorter lateral spreading secondary branches each with 3–15 racemose involucre-bearing nodes, the internodes up to 15 cm long, these also often with several shorter tertiary branches with 3–8 nodes, these internodes up to 5 cm long; bracts triangular-deltoid, 2–4 mm long, brownish, thinly lanate, the acute linear apices usually curving inwardly, ternate, connate; involucres turbinate-cylindrical, 2–3.5 mm long, 1.5–2 mm wide, densely lanate between the 5 distinct, sparsely brownish lanate ribs without, glabrous within except for the lobes, the bractlets linear-oblancheolate, numerous, 2–3 mm long, 0.2 mm wide, hirsutulous with long marginal cells, the pedicels glabrous, 2.5–4 mm long, stoutish, 8–15-flowered; perianth (2.5–)3–3.5(–4) mm long at anthesis, white to brownish-white with a reddish-brown midrib, glabrous without, pilose within on the wide upper part of the segments, the calyx-segments similar, oblong to narrowly elliptical, 3–4 mm long, 1–1.2 mm wide, the apices rounded, the bases tapering, united only at the base; stamens exserted, the filaments up to 4 mm long, pilose at the bases, the anthers oblong, 0.6–0.8 mm long, 0.4 mm wide, white to pink; perianth 4 mm long in fruit; achenes exserted, 4 mm long, ovate, the bases tapering to a point, the apices tapering to 3-angled beaks.

Type. Coarse rocky soil in a mountain pass at Portozuelo near Aguaje San Jose, Sierra Vizcaino, Baja California, Mexico, 13 Nov. 1947, *Gentry 7777* (UC-holotype, AHFH, DS, SD, US).

Additional specimens examined. At Portoguelo near Aguaje San Jose, *Gentry 7777a* (AHFH, DS, UC) *7777b* (AHFH, SD, UC, US).

*Eriogonum encelioides* is a member of the subgenus *Eucycla* (Nutt.) Kuntze and is a member of an undescribed subsection of the section *Racemosa* Rydb. which includes *E. elongatum* Benth. and *E. vollmeri* Wiggins. The species name was suggested by Gentry's label which noted that the plant resembled a "low spreading Encelia-like bush . . ."

This new species is related to *E. elongatum* and *E. vollmeri*, but it differs from both in being more woody and shrubby with a decidedly more spreading branched paniculate inflorescence with the involucre race-mosely arranged on secondary and tertiary branches. The involucre of the new species are shorter (2–3.5 mm long) than those of *E. elongatum* and *E. vollmeri* (5–7 mm long), but the flowers of *E. encelioides* are larger (3–3.5(–4) mm long) than those of its two relatives (less than 3.5 mm long). The leaf characters vary in *E. elongatum*, but the leaves are never as wide as in *E. encelioides* and *E. vollmeri*, and these two species differ mainly in that the petiole of *E. encelioides* is less than 2 cm long whereas *E. vollmeri* has petioles rarely under 3 cm long.

From *E. wrightii* Torr. ex Benth. the new species differs in having much larger, oblong to ovate leaves rather than the lance-elliptic leaves of *E. wrightii* var. *pringlei* (Coul. & Fish.) Reveal and var. *nodosum* (Small) Reveal which the new species approaches in its woody habit.

ERIOGONUM PONDII Greene, Pittonia 1:267. 1889. Low densely branched shrubs 2.5–5 dm high with several ascending di- or trichotomous leafy, lanate branches; leaves 3–25 mm long, spatulate or elliptic to obovate, the blades 2–20 mm long, 2–9 mm wide, leathery, the apices acute to rounded, gradually narrowing to short petioles 1–5 mm long, densely tomentose above and below, often less so above, present the whole length of the stem except on the short flowering branches; inflorescence of a few spreading branches, the flowering stems up to 1 cm long; bracts lacking; involucre campanulate, 3–5 mm long, 3–4.5 mm wide, densely lanate between the 5 distinct lanate ribs, the bractlets short, 1–2 mm long, linear, short-hirsutulous, the pedicels glabrous, 3–7 mm long, 10–20-flowered; perianth 2–6 mm long, white to pink, calyx-segments dissimilar, the outer whorl orbicular, 2.5–5 mm long and wide, the inner whorl spatulate, 2–6 mm long, 1–2.5 mm wide, glabrous without, minutely glandular-puberulent within toward the base of each segment; stamens included, the filaments 1–4 mm long, densely yellowish-white pilose at the bases, the anthers oblong, 0.3–0.5 mm long; achenes brown, 2.5–4 mm long, ovate, the apices tapering to 3-angled beaks.

ERIOGONUM PONDII var. PONDII. Shrubs 2–3 dm high; leaves densely tomentose on both surfaces, less than 12 mm long; perianth pink, 2.5–3 mm long, the outer whorl of segments up to 3 mm long and wide, the

inner whorl of segments up to 3.5 mm long and 1.5 mm wide; involucre 2.5–3.5 mm long and wide, the pedicels up to 5 mm long, the bractlets 1.3–2 mm long.

Type. Cedros I., Baja California, Mexico, Dec. 1888–Feb. 1889, *C. F. Pond 83* (US).

Additional specimens examined. Cedros I.: *Anthony 310A* (GH, US); *Haines & Hale s.n.* (NY, UC, US, UTC); *Moran 10599* (DS, SD, US); *Palmer 706* (GH, NY, US); *Rose 16113* (GH, US); *Rose 16114* (US). Natividad I.: *Moran 10803* (GH, SD, US). San Bartolome Bay: *Howell 10659a, 10708* (CAS, GH); *Mason 1960* (GH, UC, US); *Pond s.n.* (US); *Rose 16203* (US).

ERIOGONUM PONDII var. **gentryi** Reveal & Hanson, var. nov. A var. *pondii* differt planta 3–5 dm alta; foliis 10–25 mm longis; involucriis 4.5–5 mm longis et 4–4.5 mm latis, pedicellis ad 7 mm longis, bracteolis 1–1.3 mm longis; perianthis albis, 4.5–6 mm longis, exterioribus segmentis ad 5 mm longis et latis, interioribus segmentis ad 6 mm longis et 2.5 mm latis.

Shrubs 3–5 dm high; leaves densely tomentose below, less so above, 1–2.5 cm long; involucre 4.5–5 mm long, 4–4.5 mm wide, the pedicels up to 7 mm long, the bractlets 1–1.3 mm long; perianth white, 4.5–6 mm long, the outer whorl of segments up to 5 mm long and wide, the inner whorl of segments up to 6 mm long and 2.5 mm wide.

Type. Near eastern bajada in gravelly arroyo, Sierra Calvario, south-eastern flank of the Sierra Vizcaino, Vizcaino Desert, Baja California, Mexico, 10–15 Mar. 1947, *Gentry 7510* (UC-holotype, AHFH, DS, SD).

Additional specimens examined. Near Cerro Tordillo, Vizcaino Desert, *Gentry 7441* (AHFH, DS, SD, UC).

This species belongs to the subgenus *Eucycla* (Nutt.) Kuntze and is a member of an undescribed section.

Variety *gentryi* is an inland form apparently well isolated from var. *pondii* which grows along the immediate coast and adjacent islands.

It is a pleasure for us to name this variety in honor of Dr. Howard S. Gentry of the Crop Research Division, U.S. Department of Agriculture, and an authority on *Yucca* and *Agave*, who not only collected the plants, but gave us additional information on both.

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Department of Botany, Brigham Young University, Provo, Utah  
1228 Stratford Avenue, South Pasadena, California